IN THE CLAIMS:

Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough and underlining. This listing also reflects any cancellation and/or addition of claims.

1. (Currently Amended) A method of communicating using optical pulses comprising:

launching the pulses into an optical fiber communication system including a plurality of sections having dispersion of opposite sign, [wherein] the pulses [are] being launched at a wavelength at which the system has normal average dispersion, no amplifier being disposed between a first pair of adjacent sections from the plurality of sections and a second pair of adjacent sections from the plurality of sections.

2. (Currently Amended) A method of communicating using optical pulses comprising:

transmitting the pulses over an optical fiber communications system including a plurality of sections having dispersion of opposite sign, [wherein] the pulses [have] having a wavelength and a magnitude that allow the pulses to propagate in the system under normal average dispersion, a first pair of adjacent sections from the plurality of sections being connected to a second pair of adjacent sections from the plurality of sections without an intervening amplifier, the first pair and the second pair being adjacent within the optical fiber communications system.

3. (Currently Amended) A method of communication using optical pulses, the method comprising:

transmitting the pulses over a dispersion-managed optical-fiber communication system including a first section having a dispersion, a second section having a dispersion of opposite sign from the dispersion of the first section, a third section having a dispersion and a fourth

section having a dispersion of opposite sign from the dispersion of the third section, the second section being disposed between the first section and the third section without an intervening amplifier, [wherein] at least some pulses [are] being transmitted at a wavelength at which the system exhibits normal average dispersion.

4. (Previously Presented) The method of claim 3, wherein the pulses are solitons or solition-like.

5. (Previously Presented) The method of claim 3, wherein the pulses are phase modulated return-to-zero when launched.

6. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using sections of fiber having anomalous dispersion.

7. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using sections of SSMF fiber and section of DCF fiber.

8. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using alternative sections of fiber having opposite signs of dispersion.

9. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using dispersion compensating elements.

10. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using optical gratings.

11. (Previously Presented) The method of claim 10, wherein the communication system uses optical circulators.

12. (Previously Presented) The method of claim 3, wherein the communication system is dispersion managed using linear elements.

13. (Previously Presented) The method of claim 3, wherein the communication system is a WDM system.

14. (Previously Presented) The method of claim 3, wherein the communication system is a soliton-based communications system.

15. (Previously Presented) The method of claim 3, wherein the communication system has an asymmetric dispersion map.

16. (Previously Presented) The method of claim 3, further including pre-chirping the pulses.

17. (Previously Presented) The method of claim 3, further including launching the pulses with a pulse shape determined according to a dispersion map of the communication system.

18. (Currently Amended) A method of communicating using optical pulses, the method comprising:

launching the pulses into a dispersion-managed optical-fiber communication system <u>including a first section having a dispersion, a second section having a dispersion of opposite sign from the dispersion of the first section, a third section having a dispersion and a fourth section having a dispersion of opposite sign from the dispersion of the third section, the second section being disposed between the first section and the third section without an intervening amplifier</u>, [wherein] at least some pulses [are] <u>being</u> transmitted at a wavelength at which the system exhibits normal average dispersion.

19. (Previously Presented) The method of claim 18, wherein the pulses are solitons or soliton-like.

20. (Previously Presented) The method of claim 18, wherein the pulses are phase modulated return-to-zero when launched.

21. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using sections of fiber having anomalous dispersion.

22. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using sections of SSMF fiber sections of DCF fiber.

23. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using alternative sections of fiber having opposite signs of dispersion.

24. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using dispersion compensating elements.

25. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using optical gratings.

26. (Previously Presented) The method of claim 25, wherein the communication system uses optical circulators.

27. (Previously Presented) The method of claim 18, wherein the communication system is dispersion managed using linear elements.

28. (Previously Presented) The method of claim 18, wherein the communication system is a WDM system.

29. (Previously Presented) The method of claim 18, wherein the communication system is a soliton-based communications system.

30. (Previously Presented) The method of claim 18, wherein the communication system has an asymmetric dispersion map.

31. (Previously Presented) The method of claim 18, further including pre-chirping the pulses.

32. (Previously Presented) The method of claim 18, further including launching the pulses with a pulse shape determined according to a dispersion map of the communications system.

33. (New) A method of communicating using optical pulses comprising:

launching the pulses into an optical fiber communication system including a plurality of sections having dispersion of opposite sign, the pulses being launched at a wavelength at which the system has zero average dispersion.

34. (New) A method of communicating using optical pulses comprising:

transmitting the pulses over an optical fiber communications system including a plurality of sections having dispersion of opposite sign, the pulses having a wavelength and a magnitude that allow the pulses to propagate in the system under zero average dispersion.

35. (New) A method of communication using optical pulses, the method comprising:

transmitting the pulses over a dispersion-managed optical-fiber communication system, at least some pulses being transmitted at a wavelength at which the system exhibits zero average dispersion.

36. (New) A method of communicating using optical pulses, the method comprising:

launching the pulses into a dispersion-managed optical-fiber communication system, at least some pulses being transmitted at a wavelength at which the system exhibits zero average dispersion.

37. (New) A method of communicating using optical pulses comprising:

launching the pulses into an optical fiber communication system including a plurality of sections having dispersion of opposite sign, the pulses being launched at a wavelength at which the system has normal average dispersion, a bandpass filter being disposed within at least one section of normal dispersion from the plurality of sections.

38. (New) The method of claim 37, wherein:

the bandpass filter is disposed at a center of each of the at least one normal dispersion section from the plurality of sections.

39. (New) A method of communicating using optical pulses comprising:

transmitting the pulses over an optical fiber communications system including a plurality of sections having dispersion of opposite sign, the pulses having a wavelength and a magnitude that allow the pulses to propagate in the system under normal average dispersion a bandpass filter being disposed within at least one section of normal dispersion from the plurality of sections.

40. (New) The method of claim 39, wherein:

the bandpass filter is disposed at a center of each of the at least one normal dispersion section from the plurality of sections.